

Cell Life Spans

The Life Span of a Cell. The life span of a cell depends upon the wear and tear on that cell. Where a cell is will determine how much wear and tear it will have on it. Just like a car, the tires receive more wear when on the car than the spare in the trunk.

The decision whether it needs to be divided or not depends on the size. The bigger a cell is, the more food it needs. Since the food is taken in through the membrane, if a cell is too big, the membrane cannot let enough food in to keep the cell healthy. It has to divide and become two smaller cells. Both cells then perform daily functions.

Genes are responsible for all the functions mentioned above in the cells.

Rapidly reproducing cells are found in: *skin*, *hair*, *intestine* and *stomach* linings. These cells are in contact with the environment continually.

Why would these cells need replacing faster than the ones below?
What would cause them to wear out faster?

Slower reproducing cells are found in: *heart*, *eye* tissue, and *kidney* (among others).

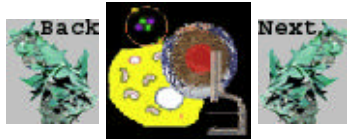
Activity of interest - Research the life span of the above 6 types of cells. Make a report using the [Big 6 Research Method](#) and for the synthesis you could make a graph of the life span of the cells. Think of some other possible ways to present the data.

Red Blood Cells have an average life span of 120 days. Genes regulate all of the functions a cell needs in order to survive. Those same genes will tell the red blood cell to pick up oxygen and carry it to other parts of your body. This is the really neat feature that makes them all a part of a bigger system.

The cells of **lens tissue** in Caucasians continue to multiply too fast during your life. This is a *gene in our population* that has made a *mistake!* As a result the lens has too many cells in it, and many people need bifocals by age 50. You may be the genetic engineer who corrects this mistake in our genes! (Think about it...a possible Nobel prize and LOTS of MONEY!)



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